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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,087	05/29/2002	Stefan Disch	1999/G-017	9098

7590 02/15/2005

Conolly & Hutz  
P O Box 2207  
Wilmington, DE 19899

EXAMINER

RAJGURU, UMAKANT K

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/069,087

Applicant(s)

DISCH ET AL

Examiner

Umakant K. Rajguru

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 11-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 11-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. An amendment has been filed on September 10, 2004.
2. Claims being examined are still 1-3 and 11-26.
3. Rejection of claims 1, 15, as well as 12, 13, 19, 20 & 23 (see item 3 of prior office action of April 05, 2004) is now withdrawn.
4. Rejections of claim 1 under 35 USC 102 (b) and 103(a) (see item 5 & 7 of same office action) are also withdrawn.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1-3 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pitt et al (US 5476653) or Muck et al (US 5994455) each in view of Kosinski (EP 448037) and Chapman et al (US 3656982).

Pitt discloses polyoxymethylene-oxyethylene copolymers. The polymer was prepared using trifluoromethanesulfonic acid as catalyst (col. 7, line 18).

Pitt does not furnish any information about extents of emission of formaldehyde.

*UKR* It is the examiners position that copolymers of Pitts obviously satisfy (claimed) limitation.

Muck discloses a process for preparation of polyoxymethylene copolymers. A strong protonic acid is used as an initiator (col. 2, line 22-29). Like Pitt, Muck is silent on extent of formaldehyde emitted.

Neither Pitt nor Muck mentions colorants (of claims 2 & 3)

Kosinski describes polyacetal compositions, which can include other useful ingredients such as pigments, colorants, stabilizers etc. (page. 12 lines 49-34).

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Chapman discloses pearlescent pigment. Such as a pigment is used after coating it with 1% calcium stearate (col. 6, lines 8-9).

Therefore it would have been obvious to admix appropriate colorant/s or pigment/s with the copolymers of Pitt or Muck and also to coat these colorant/s or pigment/s with alkali metal salt in order to impart color, hiding power and enhanced luster as well as appearance to the molded product/s made out of the copolymers.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muck et al (US 5994455) or Pitt et al (US 5476653) each in view of Kosinki (EP 448037) and Chapman et al (US 3656982) as applied claim 1 above and further in view of Yokoyama et al (US 5952410).

Muck and Pitt are silent about the amount of oxymethylene units.

Yokoyama discloses polyacetal resin composition. In col. 6, lines 16-30, patentee discusses the influence of respective amount of oxmethylenes and oxyethylene units in the copolymer on the melting temperature of the copolymer.

Hence based on teaching of Yokoyama one would obviously be led to choose the claimed mol% of oxymethylene units in order to adjust the melting point as needed, for easy processing.

8. Claims 15-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muck et al (US 5994455) or Pitt et al (US 5476653) each in view of Kosinski et al (US 5952410), Champman et al (US 3656982) and Yokoyama et al (US 5952410).

Please see item 7 (above) for the gist of this rejection.

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It is noted that prior art is silent about limitations of instant claims 12, 13, 19, 20, 23 and 24. It is the examiner's position that since prior art discloses composition containing ingredients (a) which read on the claimed ones and (b) in amounts that are similar to or overlap those that are instantly claimed, it is reasonable to infer, unless proved otherwise, that the composition of prior art obviously satisfies limitations of above claims.

Applicants on page 8 (of their above response) argue that there is no evidence in Pitt or Muck that combination of copolymers (taught by either of them) and colorant leads to reduced formaldehyde emission. Since the copolymers of Pitt and Muck are prepared by using strong protonic acid as catalyst it is reasonable to assume that the above combination inherently satisfies (claimed) limitation of reduced emission of formaldehyde.

Applicants' remarks about Kosinski and Chapman on page 9 are not persuasive. These references are secondary. They have been relied upon solely for their specific teaching of (a) use of colorants and pigments with polyacetals and (b) advantages of having such colorants and pigments coated.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to U. K. Rajguru whose telephone number is (571) 272-1077. The examiner can normally be reached on Monday-Friday from 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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U. K. Rajguru/af  
February 9, 2004



James J. Seidleck  
Supervisory Patent Examiner  
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